



July 11, 2021

Craig Thomas  
On-Scene Coordinator  
U.S. Environmental Protection Agency, Region 5  
Superfund and Emergency Management Division  
77 W. Jackson Blvd.  
Chicago, IL 60604

**Subject:** **Data Validation Report**  
**Chemtool Fire Site RS**  
**EPA Contract No.: 68HE0519D0005**  
**Task Order/Task Order Line Item No.: 103X903100320001CF004**  
**Document Tracking No. 0748**

Dear Mr. Thomas:

Tetra Tech, Inc. (Tetra Tech) is submitting this data validation report for seven air samples collected at the Chemtool Fire site. The samples were collected on June 15, 2021, and were analyzed for metals by ALS Environmental. The final laboratory data package was received on June 21, 2021.

Analytical data were evaluated in general accordance with the *EPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (January 2017).

No results were rejected. Based on the findings of this validation effort, all results may be used as qualified in this report.

If you have any questions regarding this data validation report, please call me at (509) 688-5957.

Sincerely,

A handwritten signature in blue ink that appears to read "Debbie Kutsal".

Deb Kutsal  
Senior Chemist

Enclosure

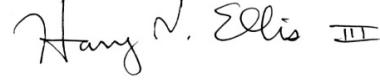
cc: Chris Burns, Tetra Tech Program Manager  
Cordell Renner, Tetra Tech Project Manager  
Connie Rodriguez, Tetra Tech Project Document Control Coordinator  
TO-TOLIN File

**ATTACHMENT 1**

**DATA VALIDATION REPORT**

**ALS ENVIRONMENTAL REPORT NO. 2116929**

## DATA VALIDATION CHECKLIST – STAGE 3

<b>Site Name</b>	Chemtool Fire Site RS	<b>Project No.</b>	103X903100320001CF004
<b>Document Tracking No.</b>	0748		
<b>Data Reviewer (signature and date)</b>	 June 27, 2021	<b>Technical Reviewer (signature and date)</b>	 6 July 2021
<b>Laboratory Report No.</b>	2116929	<b>Laboratory</b>	ALS Environmental/Salt Lake City, UT
<b>Analyses</b>	Metals by NIOSH Method 7303 modified		
<b>Samples and Matrix</b>	7 air samples		
<b>Field Duplicate Pairs</b>	None		
<b>Field Blanks</b>	Field Blank		

### INTRODUCTION

This checklist summarizes the Stage 3 validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with *NIOSH Method 7303*, and the EPA *National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017).

### OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort.

#### Data completeness:

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
N	<p>Sample results for boron were missing from the original laboratory report. The laboratory provided a revised report (Rev 2), which includes boron results for the project samples, but boron is not included in the QC summary results. The raw QC data, which does include boron results, was reviewed for this validation. Additionally, boron was not spiked in the LCS/LCSD because boron was requested after batch sample preparation had taken place.</p> <p>The analytical report for the ICSA did not include concentrations for the non-spiked analytes. A revision was requested to include these concentrations. The raw ICSA data was reviewed to support this validation effort.</p>



## DATA VALIDATION CHECKLIST – STAGE 3

### Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	<p>According to notes on the chain-of-custody (COC) form, sample RCF-Roscoe-210615, although listed on the COC form, was not received by the laboratory, and sample RCF-6121E-210615 was received by the laboratory, but was not listed on the COC form. Sample RCF-6121E-210615 was assigned laboratory ID 2116929007.</p> <p>Information regarding sample condition upon receipt is not included in the data package.</p> <p>A holding time requirement is not stated in the QAPP or the method. A reasonable holding time of 180 days for metals was met.</p>

### Instrument Performance Checks:

Within Criteria	Exceedance/Notes
NA	

### Initial Calibration:

Within Criteria	Exceedance/Notes
Y	



## DATA VALIDATION CHECKLIST – STAGE 3

### Continuing Calibration:

Within Criteria	Exceedance/Notes
N	<p>Recoveries for cobalt, magnesium, and zirconium were above QAPP acceptance limits, and the recovery for nickel was below QAPP acceptance limits in the low-level calibration verification (CRDL). Magnesium results for samples RCF-Facility-210615 and RCF-225P-210615 were &lt;10x the CRDL concentration and were qualified as estimated with possibly high bias (flagged J+). Nickel results were nondetect for all project samples and were qualified as estimated with possibly low bias (flagged UJ).</p> <p>The laboratory analyzed a Reporting Limit Verification Sample (RLVS) and reported results in units of ug/sample. The RLVS entails spiking all target analytes to a blank air filter which is then subject to all preparation steps. RLVS recoveries for beryllium, lithium, magnesium, manganese, thallium, vanadium, and zirconium were above the 80-120% acceptance limits. The detected magnesium results in samples RCF-Facility-210615 and RCF-225P-210615 were qualified as estimated with possibly high bias (flagged J+). The remaining metals with high recoveries were nondetects and did not require qualification. The RLVS recovery for nickel was below 80-120% acceptance limits. The nickel results for all project samples were nondetect and were qualified as estimated (UJ).</p>

### Calibration Verification:

Within Criteria	Exceedance/Notes
Y	

### Method blanks:

Within Criteria	Exceedance/Notes
N	Lithium was present in the laboratory reagent blank (LRB) and the laboratory method blank (LMB). Magnesium and sodium were also present in the LMB. Cobalt was present in a bracketing calibration blank. Magnesium results in samples RCF-Facility-210615 and RCF-225P-210615 were <10x the LMB concentration and were qualified as estimated with possibly high bias (flagged J+). No further qualifications were required.

### Field blanks:

Within Criteria	Exceedance/Notes
Y	



## DATA VALIDATION CHECKLIST – STAGE 3

**Interference Check Samples (ICS) (ICP metals only):**

Within Criteria	Exceedance/Notes
Y	

**System monitoring compounds (surrogates and labeled compounds):**

Within Criteria	Exceedance/Notes
NA	

**MS/MSD:**

Within Criteria	Exceedance/Notes
NA	

**Post digestion spikes:**

Within Criteria	Exceedance/Notes
NA	

**Laboratory duplicates:**

Within Criteria	Exceedance/Notes
NA	

**Serial dilutions:**

Within Criteria	Exceedance/Notes
NA	



## DATA VALIDATION CHECKLIST – STAGE 3

### Field duplicates:

Within Criteria	Exceedance/Notes
NA	

### LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	Boron was not included in the LCS/LCSD because it was requested after sample preparation had occurred. No qualifications were applied for this circumstance.

### Sample dilutions:

Within Criteria	Exceedance/Notes
NA	

### Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

### Second column confirmation (GC and HPLC analyses only):

Within Criteria	Exceedance/Notes
NA	



## DATA VALIDATION CHECKLIST – STAGE 3

**Internal Standards:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	

**Target analyte identification:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
Y	

**Analyte quantitation and MDLs/RLs:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
Y	Sample results were verified; results were found to be acceptable. Refer to calculation verification spreadsheets. MDLs are not reported in the EDD or laboratory report. Nondetects are reported to the RL.

**Tentatively identified compounds:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	

**System performance and instrument stability:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	

**Other [specify]:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	



## DATA VALIDATION CHECKLIST – STAGE 3

### Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.



## STAGE 3/4 DATA VALIDATION CHECKLIST FOR RECALCULATIONS

Data Package Number: 2116929 6010B

Validation Element	Objective	Sample ID, Run Date, and Run Time	Results (include units) and Notes (Use check mark to indicate correct result; include hand-calculated result if performed)
Initial Calibration	Confirm (in ICP raw data) that an initial calibration begins each analytical sequence, before all QC or env. samples are analyzed, using the correct number of standards (and calibration blank, if required).		
	Confirm (in ICP raw data) that an initial calibration occurs at the required frequency.		
	Confirm that initial calibration criteria are met. Spot-recalculate initial calibration results.	06172021 13:37	blank plus one non-zero standard. See 2116929 cobalt ICAL worksheet
Recalculate at least one result (and %R or %D values, as appropriate) from each of the following QC samples and environmental samples, and compare your calculated results with the results the laboratory reports on their summary forms found earlier in the data package. They should agree. If they do not, then there may be problems with the package and further review is required. Note that for some QC samples, your comparison may mean simply confirming that the result reported in the summary form matches the result in the raw data – there may not be any calculation.			
<b>SHOW ALL WORK FOR RECALCULATIONS</b>			
ICV	Check result cobalt	06172021 13:44	rpt: 519 ug/L raw: 519.4
	Recalculate one %R	rpt:104%	Calculated result:***519.4/500 = 103.9%
ICB	Check result selenium	06172021 13:45	rpt: ND/U raw: -0.307
CRDL Check Standard	Check result lead	06172021 13:50	rpt:18.1 raw: 18.07
	Recalculate one %R	rpt: 90.3%	Calculated result:*** 18.07/20 = 90.3%
RLVS Check Standard	Check result titanium	06172021 13:59	rpt: 0.0776 ug/sample raw: 3.10 ug/l (3.10)(0.025/1) = 0.0775 ug/sample
	Recalculate one %R	rpt: 103%	Calculated result:*** 0.0775/0.0750 = 103.3%

## STAGE 3/4 DATA VALIDATION CHECKLIST FOR RECALCULATIONS

Data Package Number: 2116929 6010B

Validation Element	Objective	Sample ID, Run Date, and Run Time	Results (include units) and Notes (Use check mark to indicate correct result; include hand-calculated result if performed)	
An opening CCV applicable to our samples	Check result aluminium	06172021 14:02	rpt: 50600 ug/l raw: 50612	✓
	Recalculate one %R	rpt: 101%	Calculated result:*** $50612/50000 = 101.2\%$	✓
A closing CCV applicable to our samples	Check result chromium	06172021 14:19	rpt: 5080 ug/L raw: 5084.8	
	Recalculate one %R	rpt: 102%	Calculated result:*** $5084.8/5000 = 101.7\%$	
An opening CCB applicable to our samples	Check result silver	06172021 14:04	rpt: ND/U raw: 0.321	✓
A closing CCB applicable to our samples	Check result arsenic	06172021 14:20	rpt: ND/U raw: 3.5124	
LRB	Check result zirconium	06172021 13:52	rpt: ND raw: -0.15610 ug/l	✓
	recalculate result		Calculated result: $(-0.15610)(0.025/1) = -0.00314 \text{ ug/sample}$	✓
LMB	Check result barium	06172021 13:54	rpt: ND 0.5186 ug/l	✓
	recalculate result		Calculated result: $(0.5186)(0.025/1) = 0.013 \text{ ug/sample}$	✓
ICSA sample	Check result cadmium	06172021 13:47	rpt: not summarized raw: -0.7373	✓
	Recalculate one %R	NA	Calculated result:*** NA	
ICSAB sample	Check result cadmium	06172021 13:49	rpt: 495 raw: 495	✓
	Recalculate one %R	rpt: 99%	Calculated result:*** $495/500 = 99\%$	✓
MS	Check result	NA	Calculated result:*	
	Recalculate one %R		Calculated result:****	
MSD	Check result	NA	Calculated result:*	
	Recalculate one %R		Calculated result:****	
	Recalculate one RPD value between MS and MSD		Calculated result:	

## STAGE 3/4 DATA VALIDATION CHECKLIST FOR RECALCULATIONS

Data Package Number: 2116929 6010B

Validation Element	Objective	Sample ID, Run Date, and Run Time	Results (include units) and Notes (Use check mark to indicate correct result; include hand-calculated result if performed)
Post-digestion spike	Check result	NA	
	Recalculate one %R		Calculated result:****
LCS	Check result chromium	06172021 13:55	Calculated result: * $(4053.5 \text{ ug/L})(.025/1) = 101.3 \text{ ug/sample}$
	Recalculate one %R	rpt: 101%	Calculated result: *** $101.3/100 = 101.3\%$
LCSD	Check result molybdenum	06172021 13:57	Calculated result: $(408.4 \text{ ug/L})(.025/1) = 10.2 \text{ ug/sample}$
	Recalculate one %R	rpt: 102 rpt: 0.323%	Calculated result: *** $10.2/10 = 102\%$
	Recalculate one RPD value between LCS and LCSD		Calculated result: $\{10.2-10.2\}/\{(10.2*10.2)/2\} = 0$
Serial Dilution	Check result	NA	Calculated result:**
	Recalculate one percent difference value		Calculated result:
Sample result for magnesium	Check result rpt: 3.9 ug/sample 0.0033 mg/cubic meter	06172021 14:00 RCF-Facility-210615	Calculated result: $(154.2 \text{ ug/L})(.025/1) = 3.855 \text{ ug/sample}$ $3.855/1160.4 = 0.0033 \text{ mg/cubic meter}$
RL for beryllium	rpt: .013 ug/sample 0.000011 mg/cubic meter	06172021 14:05	Calculated result: * $0.13 \text{ ug/sample}/1167.628 \text{ L} = .000011 \text{ mg/cubic meter}$
MDLs not reported	NA		

Formulas:

\* Conc. (mg/kg) =  $\{(Raw \text{ Conc. in ug/L}) \times (\text{Vol. in L}) \times DF\} / \{(\text{Sample mass in kg}) \times (\text{fractional solids}) \times (1000)\}$ \*\* Serial dilution conc. (ug/L) =  $(Raw \text{ Conc. in ug/L}) \times (DF, \text{ typically } 5)$ \*\*\* %R =  $\{(\text{Measured Value}) / (\text{True Value})\} \times 100$ \*\*\*\* %R =  $\{(\text{Spike sample result}) - (\text{Sample result})\} / (\text{Spike added}) \times 100$ RPD =  $\{[(A-B) / ((A+B)/2)]\} \times 100$ Percent difference =  $\{[(\text{Original Result} - \text{Diluted Result}) / \text{Original Result}]\} \times 100$



**6010B**  
**cobalt 06172021**

### **-----Input Calibration Data-----**

RSF in X

### ---Curve Fit Statistics

Regression Statistics					
	1 <sup>ST</sup> Degree	2 <sup>ND</sup> Degree			
	Constant	Coefficient	Coefficient	X-Intercept	r <sup>2</sup>
Weighted (1/Amt^2)					
Average		-5.1210E+05	0	#####	#NUM!
Linear	-1.0242E+01	5.3559E+00	1.91	1.00000	1.00000

## ---Sample Results

	Sample Results				
	ICV	LLCV	LCS	RLV	Sample 1
Instrum.Responses:	2756	12	2230	8	-
IS Response:					
Avg RF Result:	-0.005	0.000	-0.004	0.000	0.000
Linear(1/x2) Result:	516.534	4,089	418.217	3.451	1.158

### Weighted (1/Amt)

Linear -1.0242E+01 5.3559E+00 1.91 1.00000 1.00000

Linear(1/x) Result: 516.534 4.089 418.217 3.451 1.158

### Unweighted

Forced Zero	5.3539E+00	0	1.00000	1.00000
Linear	-1.0242E+01	5.3559E+00	1.91	1.00000
Quadratic	1.4797E+05	0.0000E+00	0.0000E+00	#DIV/0!

Linear Forced:	514.818	2.178	416.464	1.539	-0.755
Linear Result:	516.534	4.089	418.217	3.451	1.158
Quad Result (no IS):	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

$$Y = bX \quad X = Y/b$$

$$Y = bX + c \quad X = (Y - c)/b$$

### ---Quadratic Sample Calcs

$$y = ax^2 + bx + c$$

$$x = \frac{(-b + \sqrt{b^2 - 4a(c-y)}))}{2*a}$$

	<u>Intercept</u>	<u>Calculation</u>
$2a =$	0.0000E+00	
$c-y =$	1.4797E+05	
$4a(c-y) =$	0.0000E+00	
$b^2b =$	0.0000E+00	

### Quad With IS:

$z_a =$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$c-y =$	1.4522E+05	1.4796E+05	1.4574E+05	1.4796E+05	1.4798E+05
$4a(c-y) =$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$b^*b =$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$2a =$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$y = A_{(s)} * \text{Conc}_{(is)} / A_{(is)} =$	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
$c-y =$	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
$4a(c-y) =$	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
$b^*b =$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

ALS LABORATORIES REPORT NO. 2116929

Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
Field Blank	NIOSH 7303	Aluminum	5	U	5	5	ug/sample	5.0	U
Field Blank	NIOSH 7303	Arsenic	2.5	U	2.5	2.5	ug/sample	2.5	U
Field Blank	NIOSH 7303	Barium	0.25	U	0.25	0.25	ug/sample	0.25	U
Field Blank	NIOSH 7303	Beryllium	0.013	U	0.013	0.013	ug/sample	0.013	U
Field Blank	NIOSH 7303	Boron	2.5	U	2.5	2.5	ug/sample	2.5	U
Field Blank	NIOSH 7303	Cadmium	0.075	U	0.075	0.075	ug/sample	0.075	U
Field Blank	NIOSH 7303	Calcium	15	U	15	15	ug/sample	15	U
Field Blank	NIOSH 7303	Chromium	1.3	U	1.3	1.3	ug/sample	1.3	U
Field Blank	NIOSH 7303	Cobalt	0.075	U	0.075	0.075	ug/sample	0.075	U
Field Blank	NIOSH 7303	Copper	0.5	U	0.5	0.5	ug/sample	0.50	U
Field Blank	NIOSH 7303	Iron	5	U	5	5	ug/sample	5.0	U
Field Blank	NIOSH 7303	Lead	0.5	U	0.5	0.5	ug/sample	0.50	U
Field Blank	NIOSH 7303	Lithium	1	U	1	1	ug/sample	1.0	U
Field Blank	NIOSH 7303	Magnesium	1.3	U	1.3	1.3	ug/sample	1.3	U
Field Blank	NIOSH 7303	Manganese	0.13	U	0.13	0.13	ug/sample	0.13	U
Field Blank	NIOSH 7303	Molybdenum	0.38	U	0.38	0.38	ug/sample	0.38	U
Field Blank	NIOSH 7303	Nickel	0.13	U	0.13	0.13	ug/sample	0.13	UJ
Field Blank	NIOSH 7303	Phosphorus	5	U	5	5	ug/sample	5.0	U
Field Blank	NIOSH 7303	Selenium	2.5	U	2.5	2.5	ug/sample	2.5	U
Field Blank	NIOSH 7303	Silver	0.25	U	0.25	0.25	ug/sample	0.25	U
Field Blank	NIOSH 7303	Sodium	3.8	U	3.8	3.8	ug/sample	3.8	U
Field Blank	NIOSH 7303	Tellurium	1.3	U	1.3	1.3	ug/sample	1.3	U
Field Blank	NIOSH 7303	Thallium	1.3	U	1.3	1.3	ug/sample	1.3	U
Field Blank	NIOSH 7303	Titanium	0.075	U	0.075	0.075	ug/sample	0.075	U
Field Blank	NIOSH 7303	Vanadium	0.075	U	0.075	0.075	ug/sample	0.075	U
Field Blank	NIOSH 7303	Yttrium	0.075	U	0.075	0.075	ug/sample	0.075	U
Field Blank	NIOSH 7303	Zinc	0.5	U	0.5	0.5	ug/sample	0.50	U
Field Blank	NIOSH 7303	Zirconium	0.5	U	0.5	0.5	ug/sample	0.50	U
RCF-225P-210615	NIOSH 7303	Aluminum	0.0042822	U	0.0042822	mg/m3	0.0043	U	
RCF-225P-210615	NIOSH 7303	Arsenic	0.0021411	U	0.0021411	mg/m3	0.0021	U	
RCF-225P-210615	NIOSH 7303	Barium	0.00021411	U	0.00021411	mg/m3	0.00021	U	
RCF-225P-210615	NIOSH 7303	Beryllium	0.000010705	U	0.000010705	mg/m3	0.000011	U	
RCF-225P-210615	NIOSH 7303	Boron	0.0021411	U	0.0021411	mg/m3	0.0021	U	
RCF-225P-210615	NIOSH 7303	Cadmium	0.000064233	U	0.000064233	mg/m3	0.000064	U	

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

ALS LABORATORIES REPORT NO. 2116929

Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-225P-210615	NIOSH 7303	Calcium	0.012847	U		0.012847	mg/m3	0.013	U
RCF-225P-210615	NIOSH 7303	Chromium	0.0010705	U		0.0010705	mg/m3	0.0011	U
RCF-225P-210615	NIOSH 7303	Cobalt	0.000064233	U		0.000064233	mg/m3	0.000064	U
RCF-225P-210615	NIOSH 7303	Copper	0.00042822	U		0.00042822	mg/m3	0.00043	U
RCF-225P-210615	NIOSH 7303	Iron	0.0042822	U		0.0042822	mg/m3	0.0043	U
RCF-225P-210615	NIOSH 7303	Lead	0.00042822	U		0.00042822	mg/m3	0.00043	U
RCF-225P-210615	NIOSH 7303	Lithium	0.00085644	U		0.00085644	mg/m3	0.00086	U
RCF-225P-210615	NIOSH 7303	Magnesium	0.0011385			0.0010705	mg/m3	0.0011	J+
RCF-225P-210615	NIOSH 7303	Manganese	0.00010705	U		0.00010705	mg/m3	0.00011	U
RCF-225P-210615	NIOSH 7303	Molybdenum	0.00032116	U		0.00032116	mg/m3	0.00032	U
RCF-225P-210615	NIOSH 7303	Nickel	0.00010705	U		0.00010705	mg/m3	0.00011	UJ
RCF-225P-210615	NIOSH 7303	Phosphorus	0.0042822	U		0.0042822	mg/m3	0.0043	U
RCF-225P-210615	NIOSH 7303	Selenium	0.0021411	U		0.0021411	mg/m3	0.0021	U
RCF-225P-210615	NIOSH 7303	Silver	0.00021411	U		0.00021411	mg/m3	0.00021	U
RCF-225P-210615	NIOSH 7303	Sodium	0.0032116	U		0.0032116	mg/m3	0.0032	U
RCF-225P-210615	NIOSH 7303	Tellurium	0.0010705	U		0.0010705	mg/m3	0.0011	U
RCF-225P-210615	NIOSH 7303	Thallium	0.0010705	U		0.0010705	mg/m3	0.0011	U
RCF-225P-210615	NIOSH 7303	Titanium	0.000064233	U		0.000064233	mg/m3	0.000064	U
RCF-225P-210615	NIOSH 7303	Vanadium	0.000064233	U		0.000064233	mg/m3	0.000064	U
RCF-225P-210615	NIOSH 7303	Yttrium	0.000064233	U		0.000064233	mg/m3	0.000064	U
RCF-225P-210615	NIOSH 7303	Zinc	0.00042822	U		0.00042822	mg/m3	0.00043	U
RCF-225P-210615	NIOSH 7303	Zirconium	0.00042822	U		0.00042822	mg/m3	0.00043	U
RCF-225P-210615	NIOSH 7303	Aluminum	5	U		5	ug/sample	5.0	U
RCF-225P-210615	NIOSH 7303	Arsenic	2.5	U		2.5	ug/sample	2.5	U
RCF-225P-210615	NIOSH 7303	Barium	0.25	U		0.25	ug/sample	0.25	U
RCF-225P-210615	NIOSH 7303	Beryllium	0.013	U		0.013	ug/sample	0.013	U
RCF-225P-210615	NIOSH 7303	Boron	2.5	U		2.5	ug/sample	2.5	U
RCF-225P-210615	NIOSH 7303	Cadmium	0.075	U		0.075	ug/sample	0.075	U
RCF-225P-210615	NIOSH 7303	Calcium	15	U		15	ug/sample	15	U
RCF-225P-210615	NIOSH 7303	Chromium	1.3	U		1.3	ug/sample	1.3	U
RCF-225P-210615	NIOSH 7303	Cobalt	0.075	U		0.075	ug/sample	0.075	U
RCF-225P-210615	NIOSH 7303	Copper	0.5	U		0.5	ug/sample	0.50	U
RCF-225P-210615	NIOSH 7303	Iron	5	U		5	ug/sample	5.0	U
RCF-225P-210615	NIOSH 7303	Lead	0.5	U		0.5	ug/sample	0.50	U

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-225P-210615	NIOSH 7303	Lithium	1	U		1	ug/sample	1.0	U
RCF-225P-210615	NIOSH 7303	Magnesium	1.3			1.3	ug/sample	1.3	J+
RCF-225P-210615	NIOSH 7303	Manganese	0.13	U		0.13	ug/sample	0.13	U
RCF-225P-210615	NIOSH 7303	Molybdenum	0.38	U		0.38	ug/sample	0.38	U
RCF-225P-210615	NIOSH 7303	Nickel	0.13	U		0.13	ug/sample	0.13	UJ
RCF-225P-210615	NIOSH 7303	Phosphorus	5	U		5	ug/sample	5.0	U
RCF-225P-210615	NIOSH 7303	Selenium	2.5	U		2.5	ug/sample	2.5	U
RCF-225P-210615	NIOSH 7303	Silver	0.25	U		0.25	ug/sample	0.25	U
RCF-225P-210615	NIOSH 7303	Sodium	3.8	U		3.8	ug/sample	3.8	U
RCF-225P-210615	NIOSH 7303	Tellurium	1.3	U		1.3	ug/sample	1.3	U
RCF-225P-210615	NIOSH 7303	Thallium	1.3	U		1.3	ug/sample	1.3	U
RCF-225P-210615	NIOSH 7303	Titanium	0.075	U		0.075	ug/sample	0.075	U
RCF-225P-210615	NIOSH 7303	Vanadium	0.075	U		0.075	ug/sample	0.075	U
RCF-225P-210615	NIOSH 7303	Yttrium	0.075	U		0.075	ug/sample	0.075	U
RCF-225P-210615	NIOSH 7303	Zinc	0.5	U		0.5	ug/sample	0.50	U
RCF-225P-210615	NIOSH 7303	Zirconium	0.5	U		0.5	ug/sample	0.50	U
RCF-6121E-210615	NIOSH 7303	Aluminum	0.0047446	U		0.0047446	mg/m3	0.0047	U
RCF-6121E-210615	NIOSH 7303	Arsenic	0.0023723	U		0.0023723	mg/m3	0.0024	U
RCF-6121E-210615	NIOSH 7303	Barium	0.00023723	U		0.00023723	mg/m3	0.00024	U
RCF-6121E-210615	NIOSH 7303	Beryllium	0.000011861	U		0.000011861	mg/m3	0.000012	U
RCF-6121E-210615	NIOSH 7303	Boron	0.0023723	U		0.0023723	mg/m3	0.0024	U
RCF-6121E-210615	NIOSH 7303	Cadmium	0.000071168	U		0.000071168	mg/m3	0.000071	U
RCF-6121E-210615	NIOSH 7303	Calcium	0.014234	U		0.014234	mg/m3	0.014	U
RCF-6121E-210615	NIOSH 7303	Chromium	0.0011861	U		0.0011861	mg/m3	0.0012	U
RCF-6121E-210615	NIOSH 7303	Cobalt	0.000071168	U		0.000071168	mg/m3	0.000071	U
RCF-6121E-210615	NIOSH 7303	Copper	0.00047446	U		0.00047446	mg/m3	0.00047	U
RCF-6121E-210615	NIOSH 7303	Iron	0.0047446	U		0.0047446	mg/m3	0.0047	U
RCF-6121E-210615	NIOSH 7303	Lead	0.00047446	U		0.00047446	mg/m3	0.00047	U
RCF-6121E-210615	NIOSH 7303	Lithium	0.00094891	U		0.00094891	mg/m3	0.00095	U
RCF-6121E-210615	NIOSH 7303	Magnesium	0.0011861	U		0.0011861	mg/m3	0.0012	U
RCF-6121E-210615	NIOSH 7303	Manganese	0.00011861	U		0.00011861	mg/m3	0.00012	U
RCF-6121E-210615	NIOSH 7303	Molybdenum	0.00035584	U		0.00035584	mg/m3	0.00036	U
RCF-6121E-210615	NIOSH 7303	Nickel	0.00011861	U		0.00011861	mg/m3	0.00012	UJ
RCF-6121E-210615	NIOSH 7303	Phosphorus	0.0047446	U		0.0047446	mg/m3	0.0047	U

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-6121E-210615	NIOSH 7303	Selenium	0.0023723	U		0.0023723	mg/m3	0.0024	U
RCF-6121E-210615	NIOSH 7303	Silver	0.00023723	U		0.00023723	mg/m3	0.00024	U
RCF-6121E-210615	NIOSH 7303	Sodium	0.0035584	U		0.0035584	mg/m3	0.0036	U
RCF-6121E-210615	NIOSH 7303	Tellurium	0.0011861	U		0.0011861	mg/m3	0.0012	U
RCF-6121E-210615	NIOSH 7303	Thallium	0.0011861	U		0.0011861	mg/m3	0.0012	U
RCF-6121E-210615	NIOSH 7303	Titanium	0.000071168	U		0.000071168	mg/m3	0.000071	U
RCF-6121E-210615	NIOSH 7303	Vanadium	0.000071168	U		0.000071168	mg/m3	0.000071	U
RCF-6121E-210615	NIOSH 7303	Yttrium	0.000071168	U		0.000071168	mg/m3	0.000071	U
RCF-6121E-210615	NIOSH 7303	Zinc	0.00047446	U		0.00047446	mg/m3	0.00047	U
RCF-6121E-210615	NIOSH 7303	Zirconium	0.00047446	U		0.00047446	mg/m3	0.00047	U
RCF-6121E-210615	NIOSH 7303	Aluminum	5	U		5	ug/sample	5.0	U
RCF-6121E-210615	NIOSH 7303	Arsenic	2.5	U		2.5	ug/sample	2.5	U
RCF-6121E-210615	NIOSH 7303	Barium	0.25	U		0.25	ug/sample	0.25	U
RCF-6121E-210615	NIOSH 7303	Beryllium	0.013	U		0.013	ug/sample	0.013	U
RCF-6121E-210615	NIOSH 7303	Boron	2.5	U		2.5	ug/sample	2.5	U
RCF-6121E-210615	NIOSH 7303	Cadmium	0.075	U		0.075	ug/sample	0.075	U
RCF-6121E-210615	NIOSH 7303	Calcium	15	U		15	ug/sample	15	U
RCF-6121E-210615	NIOSH 7303	Chromium	1.3	U		1.3	ug/sample	1.3	U
RCF-6121E-210615	NIOSH 7303	Cobalt	0.075	U		0.075	ug/sample	0.075	U
RCF-6121E-210615	NIOSH 7303	Copper	0.5	U		0.5	ug/sample	0.50	U
RCF-6121E-210615	NIOSH 7303	Iron	5	U		5	ug/sample	5.0	U
RCF-6121E-210615	NIOSH 7303	Lead	0.5	U		0.5	ug/sample	0.50	U
RCF-6121E-210615	NIOSH 7303	Lithium	1	U		1	ug/sample	1.0	U
RCF-6121E-210615	NIOSH 7303	Magnesium	1.3	U		1.3	ug/sample	1.3	U
RCF-6121E-210615	NIOSH 7303	Manganese	0.13	U		0.13	ug/sample	0.13	U
RCF-6121E-210615	NIOSH 7303	Molybdenum	0.38	U		0.38	ug/sample	0.38	U
RCF-6121E-210615	NIOSH 7303	Nickel	0.13	U		0.13	ug/sample	0.13	UJ
RCF-6121E-210615	NIOSH 7303	Phosphorus	5	U		5	ug/sample	5.0	U
RCF-6121E-210615	NIOSH 7303	Selenium	2.5	U		2.5	ug/sample	2.5	U
RCF-6121E-210615	NIOSH 7303	Silver	0.25	U		0.25	ug/sample	0.25	U
RCF-6121E-210615	NIOSH 7303	Sodium	3.8	U		3.8	ug/sample	3.8	U
RCF-6121E-210615	NIOSH 7303	Tellurium	1.3	U		1.3	ug/sample	1.3	U
RCF-6121E-210615	NIOSH 7303	Thallium	1.3	U		1.3	ug/sample	1.3	U
RCF-6121E-210615	NIOSH 7303	Titanium	0.075	U		0.075	ug/sample	0.075	U

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-6121E-210615	NIOSH 7303	Vanadium	0.075	U		0.075	ug/sample	0.075	U
RCF-6121E-210615	NIOSH 7303	Yttrium	0.075	U		0.075	ug/sample	0.075	U
RCF-6121E-210615	NIOSH 7303	Zinc	0.5	U		0.5	ug/sample	0.50	U
RCF-6121E-210615	NIOSH 7303	Zirconium	0.5	U		0.5	ug/sample	0.50	U
RCF-715A-210615	NIOSH 7303	Aluminum	0.0046044	U		0.0046044	mg/m3	0.0046	U
RCF-715A-210615	NIOSH 7303	Arsenic	0.0023022	U		0.0023022	mg/m3	0.0023	U
RCF-715A-210615	NIOSH 7303	Barium	0.00023022	U		0.00023022	mg/m3	0.00023	U
RCF-715A-210615	NIOSH 7303	Beryllium	0.000011511	U		0.000011511	mg/m3	0.000012	U
RCF-715A-210615	NIOSH 7303	Boron	0.0023022	U		0.0023022	mg/m3	0.0023	U
RCF-715A-210615	NIOSH 7303	Cadmium	0.000069066	U		0.000069066	mg/m3	0.000069	U
RCF-715A-210615	NIOSH 7303	Calcium	0.013813	U		0.013813	mg/m3	0.014	U
RCF-715A-210615	NIOSH 7303	Chromium	0.0011511	U		0.0011511	mg/m3	0.0012	U
RCF-715A-210615	NIOSH 7303	Cobalt	0.000069066	U		0.000069066	mg/m3	0.000069	U
RCF-715A-210615	NIOSH 7303	Copper	0.00046044	U		0.00046044	mg/m3	0.00046	U
RCF-715A-210615	NIOSH 7303	Iron	0.0046044	U		0.0046044	mg/m3	0.0046	U
RCF-715A-210615	NIOSH 7303	Lead	0.00046044	U		0.00046044	mg/m3	0.00046	U
RCF-715A-210615	NIOSH 7303	Lithium	0.00092088	U		0.00092088	mg/m3	0.00092	U
RCF-715A-210615	NIOSH 7303	Magnesium	0.0011511	U		0.0011511	mg/m3	0.0012	U
RCF-715A-210615	NIOSH 7303	Manganese	0.00011511	U		0.00011511	mg/m3	0.00012	U
RCF-715A-210615	NIOSH 7303	Molybdenum	0.00034533	U		0.00034533	mg/m3	0.00035	U
RCF-715A-210615	NIOSH 7303	Nickel	0.00011511	U		0.00011511	mg/m3	0.00012	UJ
RCF-715A-210615	NIOSH 7303	Phosphorus	0.0046044	U		0.0046044	mg/m3	0.0046	U
RCF-715A-210615	NIOSH 7303	Selenium	0.0023022	U		0.0023022	mg/m3	0.0023	U
RCF-715A-210615	NIOSH 7303	Silver	0.00023022	U		0.00023022	mg/m3	0.00023	U
RCF-715A-210615	NIOSH 7303	Sodium	0.0034533	U		0.0034533	mg/m3	0.0035	U
RCF-715A-210615	NIOSH 7303	Tellurium	0.0011511	U		0.0011511	mg/m3	0.0012	U
RCF-715A-210615	NIOSH 7303	Thallium	0.0011511	U		0.0011511	mg/m3	0.0012	U
RCF-715A-210615	NIOSH 7303	Titanium	0.000069066	U		0.000069066	mg/m3	0.000069	U
RCF-715A-210615	NIOSH 7303	Vanadium	0.000069066	U		0.000069066	mg/m3	0.000069	U
RCF-715A-210615	NIOSH 7303	Yttrium	0.000069066	U		0.000069066	mg/m3	0.000069	U
RCF-715A-210615	NIOSH 7303	Zinc	0.00046044	U		0.00046044	mg/m3	0.00046	U
RCF-715A-210615	NIOSH 7303	Zirconium	0.00046044	U		0.00046044	mg/m3	0.00046	U
RCF-715A-210615	NIOSH 7303	Aluminum	5	U		5	ug/sample	5.0	U
RCF-715A-210615	NIOSH 7303	Arsenic	2.5	U		2.5	ug/sample	2.5	U

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-715A-210615	NIOSH 7303	Barium	0.25	U		0.25	ug/sample	0.25	U
RCF-715A-210615	NIOSH 7303	Beryllium	0.013	U		0.013	ug/sample	0.013	U
RCF-715A-210615	NIOSH 7303	Boron	2.5	U		2.5	ug/sample	2.5	U
RCF-715A-210615	NIOSH 7303	Cadmium	0.075	U		0.075	ug/sample	0.075	U
RCF-715A-210615	NIOSH 7303	Calcium	15	U		15	ug/sample	15	U
RCF-715A-210615	NIOSH 7303	Chromium	1.3	U		1.3	ug/sample	1.3	U
RCF-715A-210615	NIOSH 7303	Cobalt	0.075	U		0.075	ug/sample	0.075	U
RCF-715A-210615	NIOSH 7303	Copper	0.5	U		0.5	ug/sample	0.50	U
RCF-715A-210615	NIOSH 7303	Iron	5	U		5	ug/sample	5.0	U
RCF-715A-210615	NIOSH 7303	Lead	0.5	U		0.5	ug/sample	0.50	U
RCF-715A-210615	NIOSH 7303	Lithium	1	U		1	ug/sample	1.0	U
RCF-715A-210615	NIOSH 7303	Magnesium	1.3	U		1.3	ug/sample	1.3	U
RCF-715A-210615	NIOSH 7303	Manganese	0.13	U		0.13	ug/sample	0.13	U
RCF-715A-210615	NIOSH 7303	Molybdenum	0.38	U		0.38	ug/sample	0.38	U
RCF-715A-210615	NIOSH 7303	Nickel	0.13	U		0.13	ug/sample	0.13	UJ
RCF-715A-210615	NIOSH 7303	Phosphorus	5	U		5	ug/sample	5.0	U
RCF-715A-210615	NIOSH 7303	Selenium	2.5	U		2.5	ug/sample	2.5	U
RCF-715A-210615	NIOSH 7303	Silver	0.25	U		0.25	ug/sample	0.25	U
RCF-715A-210615	NIOSH 7303	Sodium	3.8	U		3.8	ug/sample	3.8	U
RCF-715A-210615	NIOSH 7303	Tellurium	1.3	U		1.3	ug/sample	1.3	U
RCF-715A-210615	NIOSH 7303	Thallium	1.3	U		1.3	ug/sample	1.3	U
RCF-715A-210615	NIOSH 7303	Titanium	0.075	U		0.075	ug/sample	0.075	U
RCF-715A-210615	NIOSH 7303	Vanadium	0.075	U		0.075	ug/sample	0.075	U
RCF-715A-210615	NIOSH 7303	Yttrium	0.075	U		0.075	ug/sample	0.075	U
RCF-715A-210615	NIOSH 7303	Zinc	0.5	U		0.5	ug/sample	0.50	U
RCF-715A-210615	NIOSH 7303	Zirconium	0.5	U		0.5	ug/sample	0.50	U
RCF-Facility-210615	NIOSH 7303	Aluminum	0.0043088	U		0.0043088	mg/m3	0.0043	U
RCF-Facility-210615	NIOSH 7303	Arsenic	0.0021544	U		0.0021544	mg/m3	0.0022	U
RCF-Facility-210615	NIOSH 7303	Barium	0.00021544	U		0.00021544	mg/m3	0.00022	U
RCF-Facility-210615	NIOSH 7303	Beryllium	0.000010772	U		0.000010772	mg/m3	0.000011	U
RCF-Facility-210615	NIOSH 7303	Boron	0.0021544	U		0.0021544	mg/m3	0.0022	U
RCF-Facility-210615	NIOSH 7303	Cadmium	0.000064632	U		0.000064632	mg/m3	0.000065	U
RCF-Facility-210615	NIOSH 7303	Calcium	0.012926	U		0.012926	mg/m3	0.013	U
RCF-Facility-210615	NIOSH 7303	Chromium	0.0010772	U		0.0010772	mg/m3	0.0011	U

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-Facility-210615	NIOSH 7303	Cobalt	0.000064632	U		0.000064632	mg/m3	0.000065	U
RCF-Facility-210615	NIOSH 7303	Copper	0.00043088	U		0.00043088	mg/m3	0.00043	U
RCF-Facility-210615	NIOSH 7303	Iron	0.0043088	U		0.0043088	mg/m3	0.0043	U
RCF-Facility-210615	NIOSH 7303	Lead	0.00043088	U		0.00043088	mg/m3	0.00043	U
RCF-Facility-210615	NIOSH 7303	Lithium	0.00086176	U		0.00086176	mg/m3	0.00086	U
RCF-Facility-210615	NIOSH 7303	Magnesium	0.0033222			0.0010772	mg/m3	0.0033	J+
RCF-Facility-210615	NIOSH 7303	Manganese	0.00010772	U		0.00010772	mg/m3	0.00011	U
RCF-Facility-210615	NIOSH 7303	Molybdenum	0.00032316	U		0.00032316	mg/m3	0.00032	U
RCF-Facility-210615	NIOSH 7303	Nickel	0.00010772	U		0.00010772	mg/m3	0.00011	UJ
RCF-Facility-210615	NIOSH 7303	Phosphorus	0.0043088	U		0.0043088	mg/m3	0.0043	U
RCF-Facility-210615	NIOSH 7303	Selenium	0.0021544	U		0.0021544	mg/m3	0.0022	U
RCF-Facility-210615	NIOSH 7303	Silver	0.00021544	U		0.00021544	mg/m3	0.00022	U
RCF-Facility-210615	NIOSH 7303	Sodium	0.0032316	U		0.0032316	mg/m3	0.0032	U
RCF-Facility-210615	NIOSH 7303	Tellurium	0.0010772	U		0.0010772	mg/m3	0.0011	U
RCF-Facility-210615	NIOSH 7303	Thallium	0.0010772	U		0.0010772	mg/m3	0.0011	U
RCF-Facility-210615	NIOSH 7303	Titanium	0.000064632	U		0.000064632	mg/m3	0.000065	U
RCF-Facility-210615	NIOSH 7303	Vanadium	0.000064632	U		0.000064632	mg/m3	0.000065	U
RCF-Facility-210615	NIOSH 7303	Yttrium	0.000064632	U		0.000064632	mg/m3	0.000065	U
RCF-Facility-210615	NIOSH 7303	Zinc	0.00043088	U		0.00043088	mg/m3	0.00043	U
RCF-Facility-210615	NIOSH 7303	Zirconium	0.00043088	U		0.00043088	mg/m3	0.00043	U
RCF-Facility-210615	NIOSH 7303	Aluminum	5	U		5	ug/sample	5.0	U
RCF-Facility-210615	NIOSH 7303	Arsenic	2.5	U		2.5	ug/sample	2.5	U
RCF-Facility-210615	NIOSH 7303	Barium	0.25	U		0.25	ug/sample	0.25	U
RCF-Facility-210615	NIOSH 7303	Beryllium	0.013	U		0.013	ug/sample	0.013	U
RCF-Facility-210615	NIOSH 7303	Boron	2.5	U		2.5	ug/sample	2.5	U
RCF-Facility-210615	NIOSH 7303	Cadmium	0.075	U		0.075	ug/sample	0.075	U
RCF-Facility-210615	NIOSH 7303	Calcium	15	U		15	ug/sample	15	U
RCF-Facility-210615	NIOSH 7303	Chromium	1.3	U		1.3	ug/sample	1.3	U
RCF-Facility-210615	NIOSH 7303	Cobalt	0.075	U		0.075	ug/sample	0.075	U
RCF-Facility-210615	NIOSH 7303	Copper	0.5	U		0.5	ug/sample	0.50	U
RCF-Facility-210615	NIOSH 7303	Iron	5	U		5	ug/sample	5.0	U
RCF-Facility-210615	NIOSH 7303	Lead	0.5	U		0.5	ug/sample	0.50	U
RCF-Facility-210615	NIOSH 7303	Lithium	1	U		1	ug/sample	1.0	U
RCF-Facility-210615	NIOSH 7303	Magnesium	3.9			1.3	ug/sample	3.9	J+

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-Facility-210615	NIOSH 7303	Manganese	0.13	U		0.13	ug/sample	0.13	U
RCF-Facility-210615	NIOSH 7303	Molybdenum	0.38	U		0.38	ug/sample	0.38	U
RCF-Facility-210615	NIOSH 7303	Nickel	0.13	U		0.13	ug/sample	0.13	UJ
RCF-Facility-210615	NIOSH 7303	Phosphorus	5	U		5	ug/sample	5.0	U
RCF-Facility-210615	NIOSH 7303	Selenium	2.5	U		2.5	ug/sample	2.5	U
RCF-Facility-210615	NIOSH 7303	Silver	0.25	U		0.25	ug/sample	0.25	U
RCF-Facility-210615	NIOSH 7303	Sodium	3.8	U		3.8	ug/sample	3.8	U
RCF-Facility-210615	NIOSH 7303	Tellurium	1.3	U		1.3	ug/sample	1.3	U
RCF-Facility-210615	NIOSH 7303	Thallium	1.3	U		1.3	ug/sample	1.3	U
RCF-Facility-210615	NIOSH 7303	Titanium	0.075	U		0.075	ug/sample	0.075	U
RCF-Facility-210615	NIOSH 7303	Vanadium	0.075	U		0.075	ug/sample	0.075	U
RCF-Facility-210615	NIOSH 7303	Yttrium	0.075	U		0.075	ug/sample	0.075	U
RCF-Facility-210615	NIOSH 7303	Zinc	0.5	U		0.5	ug/sample	0.50	U
RCF-Facility-210615	NIOSH 7303	Zirconium	0.5	U		0.5	ug/sample	0.50	U
RCF-NET1-210615	NIOSH 7303	Aluminum	0.0046675	U		0.0046675	mg/m3	0.0047	U
RCF-NET1-210615	NIOSH 7303	Arsenic	0.0023337	U		0.0023337	mg/m3	0.0023	U
RCF-NET1-210615	NIOSH 7303	Barium	0.00023337	U		0.00023337	mg/m3	0.00023	U
RCF-NET1-210615	NIOSH 7303	Beryllium	0.000011669	U		0.000011669	mg/m3	0.000012	U
RCF-NET1-210615	NIOSH 7303	Boron	0.0023337	U		0.0023337	mg/m3	0.0023	U
RCF-NET1-210615	NIOSH 7303	Cadmium	0.000070012	U		0.000070012	mg/m3	0.000070	U
RCF-NET1-210615	NIOSH 7303	Calcium	0.014002	U		0.014002	mg/m3	0.014	U
RCF-NET1-210615	NIOSH 7303	Chromium	0.0011669	U		0.0011669	mg/m3	0.0012	U
RCF-NET1-210615	NIOSH 7303	Cobalt	0.000070012	U		0.000070012	mg/m3	0.000070	U
RCF-NET1-210615	NIOSH 7303	Copper	0.00046675	U		0.00046675	mg/m3	0.00047	U
RCF-NET1-210615	NIOSH 7303	Iron	0.0046675	U		0.0046675	mg/m3	0.0047	U
RCF-NET1-210615	NIOSH 7303	Lead	0.00046675	U		0.00046675	mg/m3	0.00047	U
RCF-NET1-210615	NIOSH 7303	Lithium	0.00093349	U		0.00093349	mg/m3	0.00093	U
RCF-NET1-210615	NIOSH 7303	Magnesium	0.0011669	U		0.0011669	mg/m3	0.0012	U
RCF-NET1-210615	NIOSH 7303	Manganese	0.00011669	U		0.00011669	mg/m3	0.00012	U
RCF-NET1-210615	NIOSH 7303	Molybdenum	0.00035006	U		0.00035006	mg/m3	0.00035	U
RCF-NET1-210615	NIOSH 7303	Nickel	0.00011669	U		0.00011669	mg/m3	0.00012	UJ
RCF-NET1-210615	NIOSH 7303	Phosphorus	0.0046675	U		0.0046675	mg/m3	0.0047	U
RCF-NET1-210615	NIOSH 7303	Selenium	0.0023337	U		0.0023337	mg/m3	0.0023	U
RCF-NET1-210615	NIOSH 7303	Silver	0.00023337	U		0.00023337	mg/m3	0.00023	U

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-NET1-210615	NIOSH 7303	Sodium	0.0035006	U		0.0035006	mg/m3	0.0035	U
RCF-NET1-210615	NIOSH 7303	Tellurium	0.0011669	U		0.0011669	mg/m3	0.0012	U
RCF-NET1-210615	NIOSH 7303	Thallium	0.0011669	U		0.0011669	mg/m3	0.0012	U
RCF-NET1-210615	NIOSH 7303	Titanium	0.000070012	U		0.000070012	mg/m3	0.000070	U
RCF-NET1-210615	NIOSH 7303	Vanadium	0.000070012	U		0.000070012	mg/m3	0.000070	U
RCF-NET1-210615	NIOSH 7303	Yttrium	0.000070012	U		0.000070012	mg/m3	0.000070	U
RCF-NET1-210615	NIOSH 7303	Zinc	0.00046675	U		0.00046675	mg/m3	0.00047	U
RCF-NET1-210615	NIOSH 7303	Zirconium	0.00046675	U		0.00046675	mg/m3	0.00047	U
RCF-NET1-210615	NIOSH 7303	Aluminum	5	U		5	ug/sample	5.0	U
RCF-NET1-210615	NIOSH 7303	Arsenic	2.5	U		2.5	ug/sample	2.5	U
RCF-NET1-210615	NIOSH 7303	Barium	0.25	U		0.25	ug/sample	0.25	U
RCF-NET1-210615	NIOSH 7303	Beryllium	0.013	U		0.013	ug/sample	0.013	U
RCF-NET1-210615	NIOSH 7303	Boron	2.5	U		2.5	ug/sample	2.5	U
RCF-NET1-210615	NIOSH 7303	Cadmium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET1-210615	NIOSH 7303	Calcium	15	U		15	ug/sample	15	U
RCF-NET1-210615	NIOSH 7303	Chromium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET1-210615	NIOSH 7303	Cobalt	0.075	U		0.075	ug/sample	0.075	U
RCF-NET1-210615	NIOSH 7303	Copper	0.5	U		0.5	ug/sample	0.50	U
RCF-NET1-210615	NIOSH 7303	Iron	5	U		5	ug/sample	5.0	U
RCF-NET1-210615	NIOSH 7303	Lead	0.5	U		0.5	ug/sample	0.50	U
RCF-NET1-210615	NIOSH 7303	Lithium	1	U		1	ug/sample	1.0	U
RCF-NET1-210615	NIOSH 7303	Magnesium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET1-210615	NIOSH 7303	Manganese	0.13	U		0.13	ug/sample	0.13	U
RCF-NET1-210615	NIOSH 7303	Molybdenum	0.38	U		0.38	ug/sample	0.38	U
RCF-NET1-210615	NIOSH 7303	Nickel	0.13	U		0.13	ug/sample	0.13	UJ
RCF-NET1-210615	NIOSH 7303	Phosphorus	5	U		5	ug/sample	5.0	U
RCF-NET1-210615	NIOSH 7303	Selenium	2.5	U		2.5	ug/sample	2.5	U
RCF-NET1-210615	NIOSH 7303	Silver	0.25	U		0.25	ug/sample	0.25	U
RCF-NET1-210615	NIOSH 7303	Sodium	3.8	U		3.8	ug/sample	3.8	U
RCF-NET1-210615	NIOSH 7303	Tellurium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET1-210615	NIOSH 7303	Thallium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET1-210615	NIOSH 7303	Titanium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET1-210615	NIOSH 7303	Vanadium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET1-210615	NIOSH 7303	Yttrium	0.075	U		0.075	ug/sample	0.075	U

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-NET1-210615	NIOSH 7303	Zinc	0.5	U	0.5	0.5	ug/sample	0.50	U
RCF-NET1-210615	NIOSH 7303	Zirconium	0.5	U	0.5	0.5	ug/sample	0.50	U
RCF-NET2-210615	NIOSH 7303	Aluminum	0.0042874	U	0.0042874	0.0042874	mg/m3	0.0043	U
RCF-NET2-210615	NIOSH 7303	Arsenic	0.0021437	U	0.0021437	0.0021437	mg/m3	0.0021	U
RCF-NET2-210615	NIOSH 7303	Barium	0.00021437	U	0.00021437	0.00021437	mg/m3	0.00021	U
RCF-NET2-210615	NIOSH 7303	Beryllium	0.000010719	U	0.000010719	0.000010719	mg/m3	0.000011	U
RCF-NET2-210615	NIOSH 7303	Boron	0.0021437	U	0.0021437	0.0021437	mg/m3	0.0021	U
RCF-NET2-210615	NIOSH 7303	Cadmium	0.000064311	U	0.000064311	0.000064311	mg/m3	0.000064	U
RCF-NET2-210615	NIOSH 7303	Calcium	0.012862	U	0.012862	0.012862	mg/m3	0.013	U
RCF-NET2-210615	NIOSH 7303	Chromium	0.0010719	U	0.0010719	0.0010719	mg/m3	0.0011	U
RCF-NET2-210615	NIOSH 7303	Cobalt	0.000064311	U	0.000064311	0.000064311	mg/m3	0.000064	U
RCF-NET2-210615	NIOSH 7303	Copper	0.00042874	U	0.00042874	0.00042874	mg/m3	0.00043	U
RCF-NET2-210615	NIOSH 7303	Iron	0.0042874	U	0.0042874	0.0042874	mg/m3	0.0043	U
RCF-NET2-210615	NIOSH 7303	Lead	0.00042874	U	0.00042874	0.00042874	mg/m3	0.00043	U
RCF-NET2-210615	NIOSH 7303	Lithium	0.00085749	U	0.00085749	0.00085749	mg/m3	0.00086	U
RCF-NET2-210615	NIOSH 7303	Magnesium	0.0010719	U	0.0010719	0.0010719	mg/m3	0.0011	U
RCF-NET2-210615	NIOSH 7303	Manganese	0.00010719	U	0.00010719	0.00010719	mg/m3	0.00011	U
RCF-NET2-210615	NIOSH 7303	Molybdenum	0.00032156	U	0.00032156	0.00032156	mg/m3	0.00032	U
RCF-NET2-210615	NIOSH 7303	Nickel	0.00010719	U	0.00010719	0.00010719	mg/m3	0.00011	UJ
RCF-NET2-210615	NIOSH 7303	Phosphorus	0.0042874	U	0.0042874	0.0042874	mg/m3	0.0043	U
RCF-NET2-210615	NIOSH 7303	Selenium	0.0021437	U	0.0021437	0.0021437	mg/m3	0.0021	U
RCF-NET2-210615	NIOSH 7303	Silver	0.00021437	U	0.00021437	0.00021437	mg/m3	0.00021	U
RCF-NET2-210615	NIOSH 7303	Sodium	0.0032156	U	0.0032156	0.0032156	mg/m3	0.0032	U
RCF-NET2-210615	NIOSH 7303	Tellurium	0.0010719	U	0.0010719	0.0010719	mg/m3	0.0011	U
RCF-NET2-210615	NIOSH 7303	Thallium	0.0010719	U	0.0010719	0.0010719	mg/m3	0.0011	U
RCF-NET2-210615	NIOSH 7303	Titanium	0.000064311	U	0.000064311	0.000064311	mg/m3	0.000064	U
RCF-NET2-210615	NIOSH 7303	Vanadium	0.000064311	U	0.000064311	0.000064311	mg/m3	0.000064	U
RCF-NET2-210615	NIOSH 7303	Yttrium	0.000064311	U	0.000064311	0.000064311	mg/m3	0.000064	U
RCF-NET2-210615	NIOSH 7303	Zinc	0.00042874	U	0.00042874	0.00042874	mg/m3	0.00043	U
RCF-NET2-210615	NIOSH 7303	Zirconium	0.00042874	U	0.00042874	0.00042874	mg/m3	0.00043	U
RCF-NET2-210615	NIOSH 7303	Aluminum	5	U	5	5	ug/sample	5.0	U
RCF-NET2-210615	NIOSH 7303	Arsenic	2.5	U	2.5	2.5	ug/sample	2.5	U
RCF-NET2-210615	NIOSH 7303	Barium	0.25	U	0.25	0.25	ug/sample	0.25	U
RCF-NET2-210615	NIOSH 7303	Beryllium	0.013	U	0.013	0.013	ug/sample	0.013	U

## CHEMTOOL FIRE SITE RS AIR ANALYTICAL RESULTS SUMMARY

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Sample ID	Method	Analyte	Lab Result	Lab Qual	MDL	RL	Units	Val_Result	Val_Qual
RCF-NET2-210615	NIOSH 7303	Boron	2.5	U		2.5	ug/sample	2.5	U
RCF-NET2-210615	NIOSH 7303	Cadmium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET2-210615	NIOSH 7303	Calcium	15	U		15	ug/sample	15	U
RCF-NET2-210615	NIOSH 7303	Chromium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET2-210615	NIOSH 7303	Cobalt	0.075	U		0.075	ug/sample	0.075	U
RCF-NET2-210615	NIOSH 7303	Copper	0.5	U		0.5	ug/sample	0.50	U
RCF-NET2-210615	NIOSH 7303	Iron	5	U		5	ug/sample	5.0	U
RCF-NET2-210615	NIOSH 7303	Lead	0.5	U		0.5	ug/sample	0.50	U
RCF-NET2-210615	NIOSH 7303	Lithium	1	U		1	ug/sample	1.0	U
RCF-NET2-210615	NIOSH 7303	Magnesium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET2-210615	NIOSH 7303	Manganese	0.13	U		0.13	ug/sample	0.13	U
RCF-NET2-210615	NIOSH 7303	Molybdenum	0.38	U		0.38	ug/sample	0.38	U
RCF-NET2-210615	NIOSH 7303	Nickel	0.13	U		0.13	ug/sample	0.13	UJ
RCF-NET2-210615	NIOSH 7303	Phosphorus	5	U		5	ug/sample	5.0	U
RCF-NET2-210615	NIOSH 7303	Selenium	2.5	U		2.5	ug/sample	2.5	U
RCF-NET2-210615	NIOSH 7303	Silver	0.25	U		0.25	ug/sample	0.25	U
RCF-NET2-210615	NIOSH 7303	Sodium	3.8	U		3.8	ug/sample	3.8	U
RCF-NET2-210615	NIOSH 7303	Tellurium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET2-210615	NIOSH 7303	Thallium	1.3	U		1.3	ug/sample	1.3	U
RCF-NET2-210615	NIOSH 7303	Titanium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET2-210615	NIOSH 7303	Vanadium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET2-210615	NIOSH 7303	Yttrium	0.075	U		0.075	ug/sample	0.075	U
RCF-NET2-210615	NIOSH 7303	Zinc	0.5	U		0.5	ug/sample	0.50	U
RCF-NET2-210615	NIOSH 7303	Zirconium	0.5	U		0.5	ug/sample	0.50	U